

Jeopardy Assessment

Proposed Incidental Take Authorization: Piping Plover Habitat Improvement Project (ITA 323)

Species: Hairy-necked Tiger Beetle

Location: Douglas County

Background

Project Information

This project involves the placement of dredge material onto a beach in Allouez Bay to improve nesting and foraging habitat for the federally endangered piping plover. Approximately 3.5 acres of piping plover foraging habitat and 4.5 acres of piping plover nesting habitat would be constructed as a result of this project.

Up to 20,000 cubic yards of siltier material would be placed first, then up to 80,000 cubic yards of the sandy material (which is > 90% fine sand) would be placed over the silty material, with a minimum thickness of 3 feet and to extend a minimum of 50 feet beyond the footprint of the siltier material. Cobbles in assorted sizes would be trucked in and distributed in a manner suitable to the plover habitat needs, then dune grass would be planted in select locations.

Project construction would be through the beneficial use of suitable material dredged from the Duluth-Superior Federal Navigation Project. This material is within the authorized Federal project limits, but has not been dredged before. The planned material consists of approximately 3 feet of siltier material on top of fine sand. Chemical and Biological testing results conducted in 2015, indicate the material in this location, from the sediment surface to project depth, is suitable for in water placement and beneficial reuse.

The dredge material will be placed on site beginning in July, 2019 and is expected to be done by fall, 2019. Heavy machinery operations on the site could extend into the spring of 2020. The result of the project will be expansion of the 7 acre site and result in an approximately 13.5 acre area.

Species Information

This project has the potential to impact the hairy-necked tiger beetle (*Cicindela hirticollis rhodensis*). The hairy-necked tiger beetle is an endangered species.

Habitat: Sand beaches along Lakes Superior, Michigan and along large rivers. Larvae burrow into the beach behind the littoral drift area where the substrate is moist but less likely to swamp, but in front of the vegetated stabilized upper beach. The burrows go straight down 5-8 inches. Larvae are very picky about the moisture content of the sand and will abandon burrows that have become too wet or dry.

Life and Natural History: Eggs are laid in moist sand in late June or early July. Third instar larvae overwinter and open the burrow in May to feed. Pupation occurs in June or July. The new emerged adults may have to overwinter again before reemerging sexually mature the next spring. A two year overlapping life cycle results in newly emerged adults with year-old adults in midsummer.

State Distribution: Ashland, Bayfield, Brown, Door, Douglas, Manitowoc, Marinette, & Sheboygan Cos. Historically most counties along Lake Michigan.

Global Distribution: This northern subspecies occurs in the Great Lakes Region east to Labrador and Newfoundland.

Conservation Measures

- Adult hairy-necked tiger beetle mortality will be minimized by beginning the project during the species' active season when adults may be able to fly out of harm's way.
- Although some larval mortality is expected on this project area, an additional population of hairy-necked tiger beetle is known to occur on additional sites within the region, including Minnesota Point, which is approximately ½ mile away. The Minnesota Point site is thought to be within the dispersal distance of hairy-necked tiger beetles and it is expected that adult beetles will recolonize the WI Point Bird Sanctuary over time.
- If any hairy-necked tiger beetles are observed in the disturbance footprint, they will immediately be removed from the area. All individuals removed will be recorded (total number of each species and date removed) and reported to the Endangered Resources Review Program (DNRRERReview@wi.gov) at the conclusion of the project.
- Any dead hairy-necked tiger beetles found on site throughout the course of the project must be recorded (species, approximate age), photographed, and reported to the Endangered Resources Review Program (DNRRERReview@wi.gov) at the conclusion of the project.
- High water at the site is causing annual erosion and habitat for hairy-necked tiger beetles is diminishing over time. By completing this project and maintaining the site over time, habitat for the hairy-necked tiger beetle will be greatly increased in area and improved in quality.

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The proposed activity will minimize and mitigate impacts to the hairy-necked tiger beetle and as a result, we anticipate that take of hairy-necked tiger beetles will be low. The department has determined that the proposed activity is not likely to jeopardize the continued existence and recovery of the hairy-necked tiger beetles, or the whole plant-animal community of which it is a part, within this state and the activity is not likely to result in the destruction or adverse modification of a habitat that is critical to the continued existence of the endangered species within the state. The department has also determined that the proposed activity provides a benefit to public health, safety or welfare that justifies the activity.